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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,386	01/16/2002	Philip Gerard Cavanaugh		1684

7590  
Philip G. Cavanaugh  
26215 Ivanhoe  
Redford, MI 48239

12/29/2005

EXAMINER
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WANG, SHENGJUN

ART UNIT	PAPER NUMBER
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1617

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	<b>Application No.</b> 10/046,386	<b>Applicant(s)</b> CAVANAUGH, PHILIP GERARD	
	<b>Examiner</b> Shengjun Wang	<b>Art Unit</b> 1617	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 30 November 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: \_\_\_\_\_.
- Claim(s) objected to: \_\_\_\_\_.
- Claim(s) rejected: 43-49.
- Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_
13. ☒ Other: Drafted allowable claims.

**SHENGJUN WANG**  
**PRIMARY EXAMINER**

Shengjun Wang  
 Primary Examiner  
 Art Unit: 1617

Continuation of 3. NOTE: The proposed new claims have many new limitations compared to the claims pending, would require further consideration.

Continuation of 11. does NOT place the application in condition for allowance because: of the reasons set forth in the final rejection. In response to applicants' request for constructive assistance, the examiner draft two claims based on the disclosure in the application as initially filed. Applicant have options take the claims proposed by the examiner and pursue other subject matter in a continuation application, or applicant may file request for continued examination (RCE), or, applicants may appeal the rejection to Board of Patent Appeals and interferences.

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50 A method for synthesizing a chlorin e6-transferrin, consisting essentially of:

- (a) preparing a PB/CHAPS buffer, comprising an aqueous solution containing sodium phosphate and 3-[(3-cholidamidopropyl) dimethylammonio]- 1-propanesulfonate, wherein said buffer having a pH of about 7.4 and,
- (b) preparing a transferrin solution, by dissolving a transferrin in said PB/CHAPS buffer from step (a), wherein said transferrin is comprising human iron-saturated transferrin, and,
- (c) providing an chlorin e6 solution in the PB/CHAPS, and a CDE solution in water, and
- (d) preparing an immobilized transferrin, by mixing said transferrin solution from step (b) with a QAE-sephadex, wherein said QAE-sephadex is comprising quaternary aminoethyl-sephadex suspended in the PB/CHAPS buffer from step (a), and,
- (e) forming an immobilized chlorin c6-transferrin, by reacting said immobilized transferrin from step (d) with said chlorin e6 solution and said CDE solution,
- (f) forming a washed immobilized chlorin e6-transferrin by removing all un-reacted soluble components-from said immobilized chlorin c6-transferrin from step (e) are removed and,
- (g) forming a chlorin e6-transferrin, by a process comprising one wherein the eluting and separating of a soluble material from said washed immobilized chlorin c6-transferrin from step (f) is performed, wherein said soluble material is comprising said chlorin e6-transferrin, wherein the elution is realized by using the PB/CHAPS buffer which further comprising 0.5 M NaCl.

51 A method for synthesizing a chlorin e6-transferrin, consisting essentially of:

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- (a) preparing a PB/CHAPS buffer, comprising an aqueous solution containing sodium phosphate and 3-[(3-cholidamidopropyl) dimethylammonio]- 1-propanesulfonate, wherein said buffer having a pH of about 7.4 and,
- (b) preparing a transferrin solution, by dissolving a transferrin in said PB/CHAPS buffer from step (a), wherein said transferrin is comprising human iron-saturated transferrin, and,
- (c) Preparing an EDC-chlorin e6 comprising provide a chlorin e6 solution in a PB/CHAPS buffer having pH of about 7.2, and a CDE solution in water, and mixing the said chlorine e6 solution and the said CDE solution, and
- (d) preparing an immobilized transferrin, by mixing said transferrin solution from step (b) with a QAE-sephadex, wherein said QAE-sephadex is comprising quaternary aminoethyl-sephadex suspended in the PB/CHAPS buffer from step (a), and.
- (e) forming an immobilized chlorin c6-transferrin, by reacting said immobilized transferrin from step (d) with said EDC-chlorin e6,
- (f) forming a washed immobilized chlorin e6-transferrin by removing all un-reacted soluble components-from said immobilized chlorin c6-transferrin from step (e) are removed and,
- (g) forming a chlorin e6-transferrin, by a process comprising one wherein the eluting and separating of a soluble material from said washed immobilized chlorin c6-transferrin from step (f) is performed, wherein said soluble material is comprising said chlorin e6-transferrin, wherein the elution is realized by using the PB/CHAPS buffer which further comprising 0.5 M NaCl.